

LISTING OF THE CLAIMS

Claims 1 to 10, cancelled.

11. (currently amended) A process for controlling the strain hardening properties of a polymer comprising:

blending a polymer and nanoparticles to produce a polymeric composition;
quenching the polymeric composition at a temperature below the glass transition temperature of the polymer to yield an amorphous polymeric composition;
forming a film from the amorphous polymeric composition; and
subjecting the film to strain hardening in a rubbery state by stretching the film at a temperature between the glass transition temperature and the cold crystallization temperature,

wherein the nanoparticles are present in an effective amount of between 0.01% and 10% by volume based upon the volume of polymer used to form the polymeric composition in order to reduce the true strain at which the film formed from the polymeric composition undergoes strain hardening, ~~and~~ wherein the steps of quenching the polymeric composition and the step of forming the film are interchangeable, and wherein the polymer is selected from polystyrene or polylactic acid and the nanoparticles are selected from nanoclays or substituted Montmorillonite.

12. (cancelled)

13. (cancelled)

14. (cancelled)

15. (previously presented) The process of claim 11, wherein the nanoparticles are substituted Montmorillonite.

16. (previously presented) The process of claim 11, wherein the nanoparticles are present in an amount of between 0.1% and 10% by volume based upon the volume of polymer used to form the polymeric composition.

17. (previously presented) The process of claim 11, wherein the nanoparticles are present in an amount of between 1% and 10% by volume based upon the volume of polymer used to form the polymeric composition.

18. (previously presented) The process of claim 11, wherein the nanoparticles are present in an amount of less than 5% by volume based upon the volume of polymer used to form the polymeric composition.

19. (previously presented) The process of claim 11, wherein the polymer composition is partially or completely molten when subjected to strain hardening.

20. (cancelled)